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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/614,729

07/07/2003

Jonathan Alan Darby

248-00283

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26753

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03/07/2006

ANDRUS, SCEALES, STARKE & SAWALL, LLP
100 EAST WISCONSIN AVENUE, SUITE 1100
MILWAUKEE, WI 53202

EXAMINER

RODRIGUEZ, SAUL

ART UNIT

PAPER NUMBER

3681

DATE MAILED: 03/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/614,729		DARBY ET AL.	
	Examiner		Art Unit	
	Saúl J. Rodríguez		3681	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This communication is responsive to the amendment filed December 19, 2005.

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 22-35 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The claims have been amended to recite "first and second materials comprising different grades of a base material". The original disclosure does not support the new terminology. In other words, it has not been described to the degree such that a person of ordinary skill in the art would have been able to ascertain the scope or implications of the newly claimed subject matter from the original disclosure.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 22-35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is not clear what the limitation "different grades of a base material" encompasses. For example it is not sure if "grade" encompasses different degrees of excellence of the same material or it refers to distinct physical/chemical distinctions between them. Also, it is not clear if the claim encompasses the possibility of two different base materials. Finally, concerning claims 24 and 25, while claim 24 recites two different treatment processes, claim 25 recites that both the first and second steel components are treated by carburization (the addition of carbon to the surface of low-carbon steels at temperatures generally between 850 and 950°C). The recitations appear contradictory.

Claim Rejections - 35 USC § 102

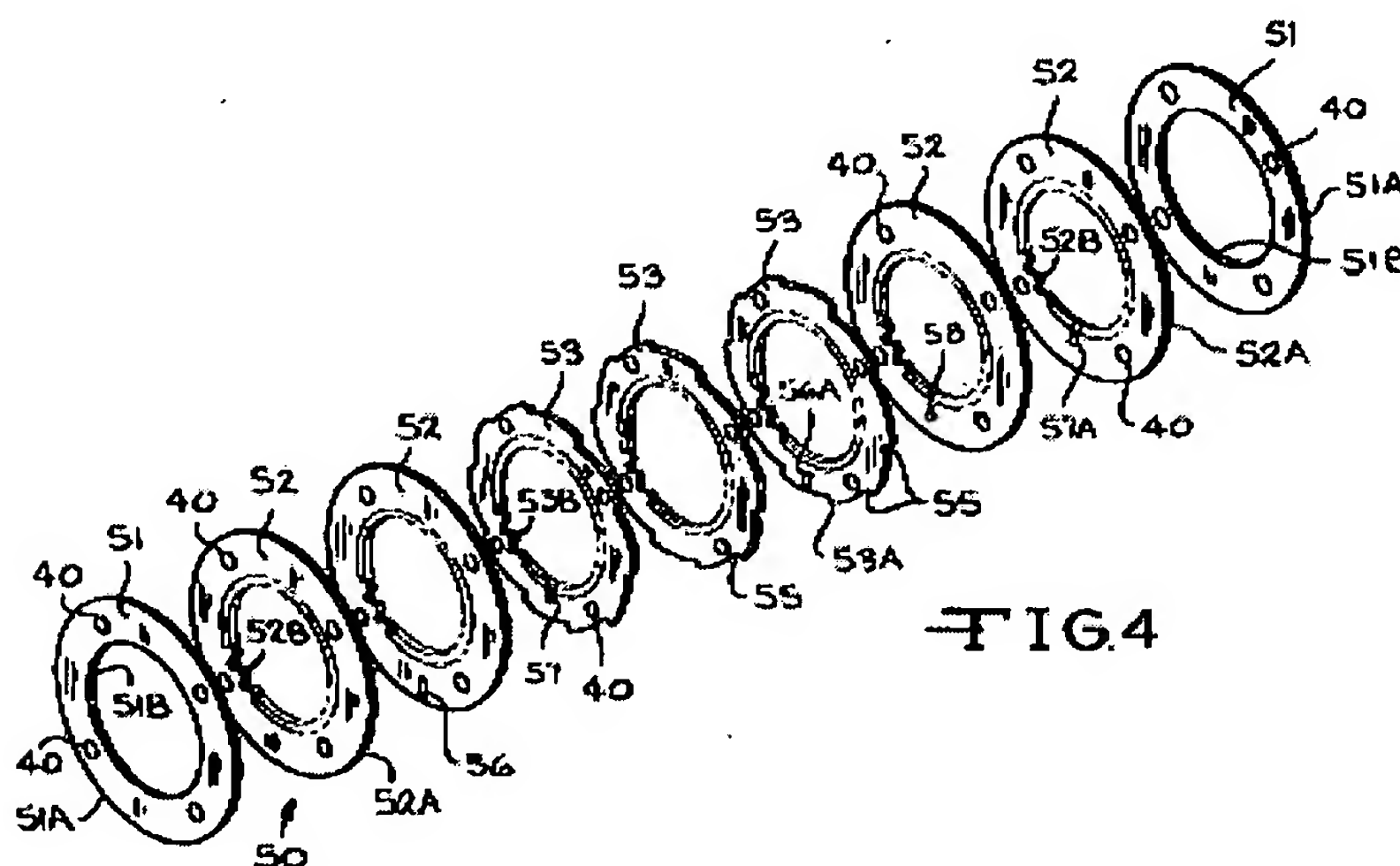
The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 22-23 and 26-29, as understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Quigley ('279).

Quigley discloses a no-back device (Fig. 1) comprising a plurality of ratchet members (22) connectable to a rotating member, pawls (25), interlocking means (40), projections and indentations (Fig. 3, 40, 41). Regarding the limitation that the "ratchets/pawls members are formed from respective materials having different chemical and/or physical properties", the prior art discloses discrete members that would inherently exhibit distinct properties (point, linear, planar, and three-dimensional defects; in additions to those unique qualities caused by processing – e.g., voids, etc.) that yielding different physical traits.



Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 24, as understood, is rejected under 35 U.S.C. 103(a) as being unpatentable over Quigley ('279) in view of Costin et al. ('403).

Quigley does not teach using materials with different treatments. Costin, however, discloses a conventional one way drive using members treated by different treatment methods (e.g. coatings; Col. 11, lines 41-49). Then, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use different materials for the components of the no-back device of Quigley in view of Costin to compensate for the material deficiencies of another.

Claim 30, as understood, is rejected under 35 U.S.C. 103(a) as being unpatentable over Quigley ('279) in view of Fitz ('643).

Quigley does not teach using materials of different specifications. Fitz, however, discloses a conventional one way drive using members made from different materials (see Abstract). Then, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use different materials for the components of the

no-back device of Quigley in view of Fitz to compensate for the material deficiencies of another.

Claim 31, as understood, is rejected under 35 U.S.C. 103(a) as being unpatentable over Quigley ('279) in view of Fitz ('643), as applied to claim 30 above, and further in view of Chiang et al. ('363).

Quigley in view of Fitz do not teach having components of different sizes or offset from one another. Chiang, on the other hand, discloses a freewheel device comprising ratchet members of different sizes and offset from one another. Then, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the above mentioned teachings of Chiang in the device of Quigley in view of Fitz to prolong the life of the clutch.

Claim 32, as understood, is rejected under 35 U.S.C. 103(a) as being unpatentable over Quigley ('279) in view of Chiang et al. ('363).

Quigley do not teach having components of different sizes or offset from one another. Chiang, on the other hand, discloses a freewheel device comprising ratchet members of different sizes and offset from one another. Then, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the above mentioned teachings of Chiang in the device of Quigley to prolong the life of the clutch.

Claims 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Quigley ('279) in view of Chiang ('363), as applied to claim 32 above, and further in view of Yoshiie et al. ('809).

Quigley in view of Chiang do not teach sensor/switch means for sensing/controlling the parameters of the no-back device. Yoshiie, on the other hand, discloses a one-way clutch having a strain gauge (80) for controlling the device by means of a controller/switch (14). Then, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use sensing/switch means in the device of Quigley in view of Chiang and in further view of Yoshiie to accurately monitor and control the parameters of the device.

Response to Arguments

Applicant's arguments filed December 06, 2006 have been fully considered but they are not persuasive.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., ratchet members performing the same function, failing at the same time, and a redundancy requirement) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Concerning applicant's arguments that the prior art does not show materials of a different grade, the arguments are moot in view of the new ground of rejection.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in **37 CFR 1.136(a)**.

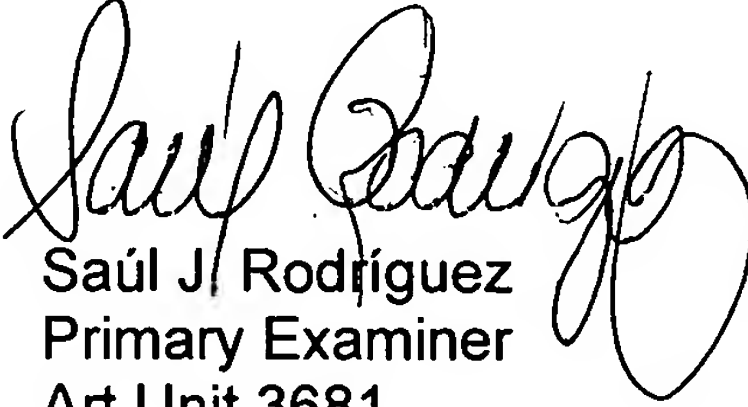
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to **37 CFR 1.136(a)** will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saúl J. Rodríguez whose telephone number is (571) 272-7097. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A. Marmor can be reached on (571) 272-7095. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3681

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Saúl J. Rodríguez
Primary Examiner
Art Unit 3681


SJR